

**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

In Re: RFC and ResCap Liquidating Trust  
Litigation

No. 13-cv-3451 (SRN/JJK/HB)

*This document relates to:*

**EXPERT REPLY DECLARATION  
OF KARL N. SNOW, PHD**

Residential Funding Company, LLC v.  
Guaranty Bank, No. 13-cv-3450 (MJD/FLN)

Residential Funding Company, LLC and  
ResCap Liquidating Trust v. Community  
West Bank, N.A., No. 13-cv-3468 (JRT/JJK)

Residential Funding Company, LLC and  
ResCap Liquidating Trust v. Colonial  
Savings, F.A., No. 13-cv-3474 (JNE/TNL)

Residential Funding Company, LLC v. First  
Guaranty Mortgage Corporation, No. 13-cv-  
3475 (RHK/HB)

Residential Funding Company, LLC and  
ResCap Liquidating Trust v. Provident  
Funding Associates, L.P., No. 13-cv-3485  
(SRN/TNL)

Residential Funding Company, LLC and  
ResCap Liquidating Trust v. PNC Bank,  
N.A., as successor in interest to National  
City Mortgage Co., NCMC Newco, Inc., and  
North Central Financial Corporation, No.  
13-cv-3498 (JRT/BRT)

Residential Funding Company, LLC v.  
Impac Funding Corp., No. 13-cv-3506  
(JNE/SER)

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Residential Funding Company, LLC v.  
Hometown Mortgage Services, Inc., No. 13-  
cv-3509 (PAM/HB)

Residential Funding Company, LLC and  
ResCap Liquidating Trust v. Universal  
American Mortgage Company, LLC, No. 13-  
cv-3519 (SRN/JSM)

Residential Funding Company, LLC v. Wells  
Fargo Bank, N.A. f/k/a Wachovia Mortgage  
Corporation, First Union National Bank, and  
First Union Mortgage Corporation, No. 13-  
cv-3521 (ADM/LIB)

Residential Funding Company, LLC v. BMO  
Harris Bank, N.A. d/b/a M&I Bank, FSB,  
No. 13-cv-3523 (JNE/FLN)

Residential Funding Company, LLC v.  
SouthTrust Mortgage Corp. and Wells Fargo  
Bank, N.A., No. 13-cv-3524 (DSD/HB)

Residential Funding Company, LLC v. Wells  
Fargo Financial Retail Credit, Inc., No. 13-  
cv-3525 (SRN/JSM)

Residential Funding Company, LLC and  
ResCap Liquidating Trust v. Standard Pacific  
Mortgage, Inc., No. 13-cv-3526 (JRT/JJK)

Residential Funding Company, LLC and  
ResCap Liquidating Trust v. National Bank  
of Kansas City, No. 13-cv-3528  
(ADM/TNL)

Residential Funding Company, LLC v. DB  
Structured Products, Inc. and MortgageIT,  
Inc., No. 14-cv-143 (ADM/TNL)

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Residential Funding Company, LLC v. CTX  
Mortgage Company, LLC, No. 14-cv-1710  
(DSD/TNL)

Residential Funding Company, LLC v.  
Home Loan Center, Inc., No. 14-cv-1716  
(DWF/JJK)

Residential Funding Company, LLC v.  
Decision One Mortgage Company, LLC and  
HSBC Finance Corporation, No. 14-cv-1737  
(MJD/JSM)

Residential Funding Company, LLC v.  
E-Loan, Inc., No. 14-cv-1739 (PAM/JJK)

Residential Funding Company, LLC v.  
Rescue Mortgage, Inc., No. 14-cv-1740  
(PJS/TNL)

Residential Funding Company, LLC v.  
American Mortgage Network, LLC f/k/a  
American Mortgage Network, Inc., d/b/a  
Vertice and AMNET Mortgage LLC, f/k/a  
AMNET Mortgage, Inc., f/k/a American  
Residential Investment Trust, Inc. and Wells  
Fargo Bank, N.A., No. 14-cv-1760  
(PJS/TNL)

ResCap Liquidating Trust v. Freedom  
Mortgage Corporation, No. 14-cv-5101  
(MJD/HB)

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**I Karl N. Snow declare pursuant to 28 U.S.C. § 1746 as follows:**

## Table of contents

I. Scope of charge .....	1
II. Summary of opinions .....	2
III. Dr. Barnett's criticisms are misplaced or incorrect .....	3
III.A. Dr. Barnett's opinion on the usefulness of sampling in this matter is based upon a legal assumption ....	3
III.B. The protocol's sample size and associated margin of error is sufficient to draw scientifically valid and reliable conclusions about the population .....	4
III.C. Hypothetical population errors do not render my protocol unreliable.....	5
III.D. Dr. Barnett's contention that it is necessary to determine breach rates of subsets of loans is unsupported.....	5
III.E. Dr. Barnett's claim that the breach rate cannot be expressed as the answer to a binary question is unjustified and incorrect .....	6
III.F. Sampling protocols approved in numerous RMBS litigations demonstrate that sampling is reliably used even when the possibility of missing loan files exists .....	7
III.G. Assessment of reliability of the sampling protocol does not require knowledge of the extrapolation method or the outcomes of the representativeness tests .....	8
III.H. The proposed sampling methodology is designed to determine a population breach rate, which can be used as an input to determine liability and damages .....	9
III.I. Dr. Barnett improperly conflates protocol with implementation .....	9
III.J. Summary.....	9

## I. Scope of charge

- (1) I have been asked by counsel on behalf of Plaintiffs (collectively "RFC") to review and respond to the expert declaration submitted on March 13, 2015 by Dr. Arnold Barnett ("Barnett Decl.") on issues related to statistical sampling in the above captioned matter.
- (2) A summary of my qualifications is contained in my declaration submitted in this matter on February 17, 2015. As in that declaration, the analyses and opinions in this declaration are based upon the results of my research, review, and analysis of the materials provided to me, my education and training, and my experience as an academic, professional in the financial services industry, and consultant on related topics. As additional materials and information become available or if the scope of discovery or the causes of action change in any material way, I reserve the right to amend, supplement, or update my analysis and conclusions.
- (3) Bates White is compensated for my time on this matter at a rate of \$700 per hour. In addition to my own time, I directed other Bates White professionals who performed supporting work in connection with my preparation of this declaration. My opinions in this matter are in no way dependent on my or Bates White's compensation.

## II. Summary of opinions

(4) In sum, I have reached the following conclusions:

- Dr. Barnett's criticism that a determination of breach must be done on a loan-level basis is based upon a *legal assumption*. Regardless of the legal arguments surrounding this issue, the sampling methodology I described in my opening declaration can reliably estimate an aggregate breach rate and associated losses, something Dr. Barnett does not dispute.
- My sampling protocol's sample size and associated margin of error is sufficient to draw scientifically valid and reliable conclusions about the population.
- Hypothetical errors in identifying the population can be addressed with the well-established statistical process known as post-stratification and/or additional sampling; such potential discrepancies do not render my methodology unreliable.
- Dr. Barnett's contention that it is "problematic" that my protocol does not allow for extrapolation to specific subgroups (such as a particular securitization) is misguided on several dimensions. First, this is a legal assumption and Dr. Barnett provides no basis or support for why it is necessary to extrapolate on a securitization-by-securitization basis. Second, stratification or sampling by securitization, or any other loan characteristic for that matter, is not necessary to reliably extrapolate the aggregate breach rate or associated losses from the sample or to achieve the desired margin of error described in my declaration.
- Dr. Barnett's claim that breach cannot or should not be expressed as the answer to a binary question is unjustified and incorrect.
- The possibility of missing loan files is not a basis upon which to find my sampling protocol to be unreliable; this potential for missing data exists in many empirical analyses, including those in the numerous residential mortgage-backed security litigations approving sampling.
- Dr. Barnett's argument that one cannot assess the reliability of my methodology because I have not disclosed my extrapolation method or results of representativeness tests is incorrect. First, I have disclosed that I would use standard techniques to extrapolate the sample results. Second, as a matter of statistics, neither the extrapolation method, nor representativeness tests are necessary to assess the reliability of my sampling methodology.
- Dr. Barnett also improperly conflates the protocol with implementation by his argument that it is necessary to draw the samples, determine if there are any missing loan files and conduct representative tests (and avoiding any errors in implementing my protocol) before determining whether the protocol is reliable.

(5) An explanation of each of these opinions follows below.

### III. Dr. Barnett's criticisms are misplaced or incorrect

#### III.A. Dr. Barnett's opinion on the usefulness of sampling in this matter is based upon a legal assumption

- (6) Dr. Barnett first criticizes my sampling methodology because “nothing in [Dr. Snow’s] report supports the utility or reliability of [the] proposed sample to answer the breach question at the individual loan-level.”<sup>1</sup> The premise for this critique is not based upon statistics, but rather a legal assumption from Defendants’ counsel: “I understand that Defendants may argue that the relevant loan purchase contracts in these matters require a determination of breach status at the level of individual loans.”<sup>2</sup>
- (7) Regardless of the legal arguments surrounding Dr. Barnett's contention, the sampling methodology I described in my opening declaration<sup>3</sup> can reliably estimate an aggregate or population breach rate and associated losses. Specifically, the data required to evaluate my methodology includes loans sold by each of the above-captioned Defendants to RFC that (a) have, as of May 2014, either actual losses of at least \$500 (i.e., due to liquidation events or loan modifications) or expected losses (90+ days delinquent or had statuses of foreclosure, or real estate owned (REO)), and (b) were included in securitizations that were the subject of claims resolved by settlements in RFC’s bankruptcy.<sup>4</sup> For the purposes of this analysis, I do not consider that loans as to which RFC has received repurchase or similar compensation to be part of the relevant population.
- (8) Indeed, this analysis may allow the Court or factfinder to reach conclusions about the overall population breach rate and associated losses on those loans, something Dr. Barnett does not dispute; in fact, Dr. Barnett states that “[t]he purpose of sampling is to draw general conclusions about the associated populations.”<sup>5</sup>
- (9) Dr. Barnett also contends that “[e]stimating the breach rate, in and of itself, however, cannot identify the *specific loans* in the unsampled population that are in breach.”<sup>6</sup> This statement is irrelevant for

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<sup>1</sup> Barnett Decl., ¶17.

<sup>2</sup> *Id.*, ¶10b.

<sup>3</sup> Expert Declaration of Karl N. Snow, PhD, Feb. 17, 2015 [hereinafter, “Snow Decl.”].

<sup>4</sup> See Snow Decl. ¶36.

<sup>5</sup> Barnett Decl., ¶18.

<sup>6</sup> *Id.* (emphasis in original).

obtaining an estimate of a pool-wide characteristic such as the aggregate breach rate, which is the purpose of my protocol.<sup>7</sup>

### III.B. The protocol's sample size and associated margin of error is sufficient to draw scientifically valid and reliable conclusions about the population

- (10) Dr. Barnett does not dispute that, for the purposes of extrapolating the sample breach rate to the relevant population of loans, a randomly drawn sample size of 150 loans will produce a 95% confidence interval for the population breach rate with a margin of error of no more than 8%.<sup>8</sup> He also admits that this margin of error is a “worst-case” scenario and that the margin of error may be smaller than 8%.<sup>9</sup>
- (11) Dr. Barnett claims that a maximal margin of error of 8% is larger “than it might seem” and “weaker” than what is commonly used in statistical sampling.<sup>10</sup> Both of these claims are misleading. Dr. Barnett fails to demonstrate that in the context of RMBS-related litigation such level of precision is inappropriate; in fact, it is telling that Dr. Barnett does not cite a single academic treatise to support his contention. Furthermore, the margin of error relates to the precision, and not the scientific reliability, of the process used to generate the estimate.
- (12) Dr. Barnett claims, however, that I “assert[] without meaningful explanation or statistical foundation that this accuracy standard ‘strikes a balance among practical considerations’ and that it is ‘sufficiently large to draw scientifically valid conclusions about the population.’”<sup>11</sup> This is incorrect. As noted in my initial declaration, there is a tradeoff between precision and sample size; the margin of error is a direct result of sample size.<sup>12</sup> As shown in Figure 2 of my opening declaration, to increase the margin of error to no more than 5%, the sample size would need to be nearly tripled to 400 loans.<sup>13</sup>

<sup>7</sup> A researcher from the Office of the Comptroller of the Currency (OCC) has proposed using simple random sampling in analyzing mortgage-backed securities. Specifically, he proposed selecting a non-stratified sample of mortgages from the underlying pool, re-verifying credit characteristics (such as Loan-to-Value Ratios), and estimating population averages to compare against those reported to investors. *See* Douglas Robertson, “*So That’s Operational Risk!*,” OCC Economics Working Paper 2011-1, March 2011.

<sup>8</sup> Assuming a binary outcome from the re-underwriting process. *See* Barnett Decl., ¶23.

<sup>9</sup> *Id.* *See also* Barnett Decl., ¶19 (where Dr. Barnett demonstrates that the margin of error is 6.4% when assuming the sample breach rate is 20%).

<sup>10</sup> Barnett Decl., ¶¶24-25.

<sup>11</sup> Barnett Decl., ¶22.

<sup>12</sup> *See* Snow Decl., ¶41, Fig. 2.

<sup>13</sup> *Id.*



- (13) Also, smaller samples (and correspondingly larger margins of error) have been approved in RMBS sampling matters that I am familiar with. For instance, the court in *Fed. Hous. Fin. Ag. v. JPMorgan Chase & Co.* has approved a sample size of 100 loans (with a corresponding maximal margin of error 10%) for the purposes of proving liability and damages.<sup>14</sup> Furthermore, Judge Glenn in *In re Residential Capital, LLC* recently granted a motion seeking approval of my same sampling protocol proposed here (i.e., drawing a random sample of 150 loans), which was based on my declaration (as here) and opposed by Dr. Barnett.<sup>15</sup>
- (14) On a related note, Dr. Barnett asserts that, for non-binary questions or analyses, using the sample (such as determining the amount of losses associated with breaching loans), could “greatly exceed” 8%, and that this would “almost certainly happen if Dr. Snow’s results are used in the estimation of damages.”<sup>16</sup> Although it is true that the maximal margin of error of 8% cannot be determined *a priori* for non-binary questions, the realized margin of error for such analyses could actually be *less* than 8%. Dr. Barnett provides no evidence to support his claims and hence his assertions on this issue are unsupported and speculative.

### III.C. Hypothetical population errors do not render my protocol unreliable

- (15) Dr. Barnett contends that “issues arise” when there is uncertainty regarding the appropriate population from which to draw the sample.<sup>17</sup> First, Dr. Barnett provides no evidence of any such uncertainty other than mere speculation.<sup>18</sup> Second, any hypothetical errors in identifying the population can be addressed with the well-established statistical process known as post-stratification and/or additional sampling; such potential discrepancies do not render my methodology unreliable.

### III.D. Dr. Barnett’s contention that it is necessary to determine breach rates of subsets of loans is unsupported

- (16) Above and beyond Dr. Barnett’s argument that a loan-by-loan determination of breach precludes sampling, he states that he “understand[s] that it might be important in this matter to conduct specific

<sup>14</sup> Snow Decl., fn. 43 citing *Fed. Hous. Fin. Ag. v. JPMorgan Chase & Co.*, 2012 WL 6000885, at \*5 (S.D.N.Y. Dec. 3, 2012).

<sup>15</sup> *In re Residential Capital, LLC*, No. 14-07900-mg, ECF No. 56 (Bankrp. S.D.N.Y. Jan. 13, 2015).

<sup>16</sup> Barnett Decl., ¶10f.

<sup>17</sup> Barnett Decl., ¶¶14-15

<sup>18</sup> As an example, Dr. Barnett notes that the total at-issue population for SouthTrust Mortgage Corp. matter that he was given by Defendants’ counsel differs from the total I identified (2,499 versus 2,439 for a difference of 60 loans). Barnett Decl., fn. 13. My analysis indicates that there are 60 loans sold by SouthTrust Mortgage Corp. and are part of the relevant securitizations with less than \$500 in losses, and these 60 loans were excluded from my analysis. Hence, I have no reason to believe that I have incorrectly identified the total at-issue population.

assessments for subsets of the at-issue populations” such as by lien, department of origination, or securitization.<sup>19</sup> He further contends that my proposed sampling protocol is “problematic” because it might be “necessary” to determine breach rates of such subsets of loans.<sup>20</sup> Besides the fact that this criticism is based upon another legal assumption that he admits in his opening sentence—“*I understand that it might be important . . .*” (emphasis added)—this critique is misplaced for several reasons.

- (17) First, Dr. Barnett provides no reason or support that either subsample or a particular securitization analysis is necessary or critical in this matter in general, or for calculating an aggregate breach rate in specific. Rather, Dr. Barnett only “suppose[s]” that such analysis is important.<sup>21</sup>
- (18) Second, Dr. Barnett’s arguments are misplaced because the protocol is not designed to determine breach rates for his specified subsets. The relevant issue is whether the protocol is designed to reliably determine an aggregate breach rate—which Dr. Barnett does not dispute. As noted in my initial declaration, reliable extrapolation of the population breach rate can be determined despite the varied characteristics of the underlying mortgages or types of defects. Simple random sampling (like the sampling protocol proposed in my opening declaration) will produce an unbiased estimate of the population defect rate and associated losses<sup>22</sup>—even if the loans differ on many dimensions, e.g., the relevant characteristic for reliably determining a population breach rate is whether the sample loans are in breach. In order to do the extrapolation, all that the statistician needs to know is whether the loan has a defect.<sup>23</sup>

### III.E. Dr. Barnett's claim that the breach rate cannot be expressed as the answer to a binary question is unjustified and incorrect

- (19) Dr. Barnett also contends that the determination of whether a loan is in material breach cannot always be stated as a binary, yes/no outcome, stating that “[q]uestions about breaches of representations and warranties might have probabilities rather than certainties attached to the answers.”<sup>24</sup> I disagree: material breach can always be stated as a binary yes/no answer.

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<sup>19</sup> Barnett Decl., ¶28.

<sup>20</sup> Barnett Decl., ¶30.

<sup>21</sup> *Id.*

<sup>22</sup> See Steven K. Thompson, *Sampling*, (Hoboken, NJ: John Wiley & Sons, Inc. 2012), 3 [*hereinafter* “Thompson”].

<sup>23</sup> Snow Decl., ¶16. Dr. Barnett implies that, because “different departments at Community West Bank originated or acquired the loans at-issue in that matter,” it may be necessary to determine breach rates by the source of origination. Barnett Decl., ¶28, fn. 26. First, Dr. Barnett provides no evidence that such analysis is necessary in this matter. Second, the fact that loans may have been originated through different channels does not preclude the reliable estimation of an aggregate breach rate for Defendants like Community West Bank because the sample will be representative of the population.

<sup>24</sup> Barnett Decl., ¶¶48-49. Also, it is important to note that Dr. Barnett provides no RMBS litigation examples to support

- (20) An example demonstrates why Dr. Barnett's argument is wrong. Suppose that the results of re-underwriting produced three possible outcomes with respect to the question of material breach: "yes," "no," or "maybe" where "maybe" reflects loans that have a less than certain probability of being in breach. The loans classified as "maybe" could be grouped with the loans classified as "no," or alternatively, with the loans classified as "yes." The statistician could then perform the extrapolation based upon one or both groupings. Because the three categories have been reduced to a binary outcome, the extrapolations (assuming a sample size of 150) would have a margin of error of no more than 8%. Hence, whether a loan is in breach is a binary question.
- (21) Consistent with this notion, I am aware that Judge Rakoff stated in *Flagstar*: "Flagstar argues that the key determination of 'materiality' is not a binary determination, but rather a question of degree of severity . . . . However, the ultimate determination . . . the Court must make—is in fact a binary decision: did any given loan in the sample breach the representations and warranties in a way that was material and adverse to Assured's interests, or not." "In other words, the fundamental decision is a binary one: whether or not Flagstar was obligated to repurchase any given loan in the sample."<sup>25</sup> Judge Glenn has also rejected this argument by Dr. Barnett.<sup>26</sup>
- (22) Dr. Barnett also takes issue with my proposition that my sampling protocol will allow for the unbiased estimation of both the defect rate and the dollar losses associated with those loans which can be used as an input in determining liability and calculating damages by attacking the cited authority.<sup>27</sup> This is incorrect, misleading, and misses the point. The cited textbook states "[a] probability design such as simple random sampling thus can provide unbiased estimates of the population mean and total."<sup>28</sup> Although it does not mention mortgages, the relation to RMBS litigation is straightforward because the breach rate is a mean or average, and the dollar losses associated with breaching loans is a total.

### III.F. Sampling protocols approved in numerous RMBS litigations demonstrate that sampling is reliably used even when the possibility of missing loan files exists

- (23) Dr. Barnett pejoratively claims that, because I have also selected a backup sample in addition to the initial sample, I "fear[]" that an *appreciable* fraction of loan files in the initial samples might be

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his argument. To the contrary, in every RMBS matter which I have been involved, my understanding has been that re-underwriters make a binary determination of breach just as originators make a binary determination on whether originate the loan.

<sup>25</sup> *Assured Guaranty Municipal Corp. v. Flagstar Bank, FSB*, 920 F. Supp.2d 475, 503 (S.D.N.Y. 2013).

<sup>26</sup> *In re Residential Capital, LLC*, No. 14-07900-mg, ECF No. 56, 5 (Bankrp. S.D.N.Y. Jan. 13, 2015).

<sup>27</sup> Barnett Decl. ¶51.

<sup>28</sup> Thompson (2012), 3.

missing.”<sup>29</sup> He further claims that “the procedure [] propose[d] for replacing missing files could introduce bias even if an initial sample of loans and their potential replacements were randomly selected.”<sup>30</sup> Both of these claims are speculative and unsupported.

- (24) The possibility of missing loan files exists in any RMBS matter involving the re-underwriting of a sample. Furthermore, in the RMBS cases I am familiar with, the *possibility* of missing loan files has not precluded courts from accepting sampling.<sup>31</sup> There are backup replacements for the sample—for instance, if the relevant parties cannot produce certain loan files, supplementation of the samples can occur by using replacement loans from the backup sample (which was also randomly selected). Furthermore, if the sample loans with available files do not match the population, supplementation of the samples can occur by sampling in exactly the same way the first sample was generated to provide enough loans for review. Random supplementation of a random sample is also representative of the population from which both samples are selected.

### III.G. Assessment of reliability of the sampling protocol does not require knowledge of the extrapolation method or the outcomes of the representativeness tests

- (25) Dr. Barnett’s argument that one cannot assess the reliability of my methodology because I have not disclosed my extrapolation method or representativeness tests is incorrect.<sup>32</sup> As a matter of statistics, neither the extrapolation method nor the representativeness tests are necessary to assess the sampling methodology. Also, RMBS cases that I am familiar with reject this argument.<sup>33</sup>
- (26) As noted in my initial declaration, the exact method of extrapolation will be based on the sample re-underwriting data, and I will use established and commonly accepted statistical methods to extrapolate the sample-based breach rates and associated losses to the population.<sup>34</sup> Indeed, Dr. Barnett used such a standard method in his declaration when he extrapolated a sample result to the population.<sup>35</sup>

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<sup>29</sup> Barnett Decl., ¶10g (emphasis added).

<sup>30</sup> *Id.* See also Barnett Decl., ¶¶52-54 (arguing that missing loan files may bias re-underwriting results).

<sup>31</sup> See, e.g., *Nat’l Credit Union Admin. Bd. v. RBS Securities, Inc.*, 2014 WL 1745448, at \*3 (D. Kan. Apr. 30, 2014) (rejecting the missing loan argument).

<sup>32</sup> Barnett Decl., ¶10a.

<sup>33</sup> See, e.g., *RBS Securities, Inc.*, 2014 WL 1745448 at \*3 (“Nor have defendants provided any authority or evidence, from their own expert or otherwise, to suggest that the absence of a chosen extrapolation method makes the sampling method unreliable.”).

<sup>34</sup> Snow Decl., ¶45.

<sup>35</sup> Barnett Decl., ¶19 (using a classical estimator).

### III.H. The proposed sampling methodology is designed to determine a population breach rate, which can be used as an input to determine liability and damages

- (27) Dr. Barnett also contends he cannot evaluate my sampling methodology because Plaintiffs have not defined the questions it is designed to answer.<sup>36</sup> However, as noted in my initial declaration, my proposed sampling protocol is designed to answer a specific question: What is the fraction of loans the population that breach the representations and warranties made by the Defendants (the defect rate).<sup>37</sup> The fact that similar sampling protocols have been used in other RMBS litigation matters to aid in determining liability and damages demonstrates that my methodology can be reliably used for such purposes.<sup>38</sup>

### III.I. Dr. Barnett improperly conflates protocol with implementation

- (28) Dr. Barnett makes two related arguments: (1) one cannot assess the reliability of my protocol until *after* the samples are drawn, and *after* representative tests are conducted on the final sample (and an accounting made for any missing loans), and (2) there *may* be a potential failure to adhere to my protocol during its implementation.<sup>39</sup> Both of these arguments are irrelevant; they improperly conflate the protocol with the results and implementation thereof. These issues are not reflective of the reliability of my sampling methodology.<sup>40</sup>

### III.J. Summary

- (29) Sampling is a scientifically valid method of obtaining an unbiased view of a population without having to examine each and every element of the population. The use of sampling is a widely accepted practice in academia, government, industry, and the courts. In particular, courts have approved sampling in multiple cases involving mortgages for the purpose of determining pool-wide breach rates and for proving liability and damages.
- (30) My proposed sample design provides for a sample of 150 loans from the relevant populations of loans that, with the associated re-underwriting results, will allow for the reliable determination of breach rates that can be extrapolated to the associated populations of loans, as well as used for the purpose of

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<sup>36</sup> Barnett Decl., ¶11.

<sup>37</sup> Snow Decl., ¶36 (“unbiased view of the associated population defect or breach rates, as well as an input in determining damages and liability”).

<sup>38</sup> See Snow Decl., ¶¶28-35 (citing cases accepting sampling).

<sup>39</sup> Barnett Decl., ¶11.

<sup>40</sup> See *RBS Securities, Inc.*, 2014 WL 1745448 at \*3 (rejecting same argument; “The fact that an expert could botch the use of a method does not make the method itself unreliable.”).

Expert Reply Declaration of Karl N. Snow, PhD

proving liability and damages. Dr. Barnett's criticisms of my sampling protocol are unsupported, incorrect, or irrelevant.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on March 27, 2015.

By:

A handwritten signature in black ink, appearing to read "Karl N. Snow". The signature is written in a cursive, somewhat stylized script.

Dr. Karl N. Snow, PhD.